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Lastly, my research is dedicated to the memory of Professor George J. Stigler of the University of Chicago, with whom I had the honor and pleasure of working in my formative years as an assistant professor. The quotation from his work on the next page may explain.

Paul W. MacAvoy
207 Evans Hall
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"Regulation and competition are rhetorical friends and deadly enemies: over the doorway of every regulatory agency . . . should be carved *competition not admitted*."

George J. Stigler, first lecture, page ten, of M.F. Cohen and G. J. Stigler *Can Regulatory Agencies Protect Consumers?* American Enterprise Institute, Washington, D.C., December 1971.

About the Author

PAUL W. MACAVOY holds the Williams Brothers Professorship in Management Studies at the Yale School of Management. He was formerly dean of the Yale School of Management, and dean as well as John M. Olin Professor at the University of Rochester's William E. Simon Graduate School of Business Administration. At the Massachusetts Institute of Technology in the 1970s, Professor MacAvoy was the Luce Professor of Public Policy, and at Yale in the early 1980s he was the Steinbach Professor of Organization and Management and the Beinecke Professor of Economics.

Professor MacAvoy's professional work has centered on regulation of and strategic decision making by firms in the energy, transportation, and telecommunications industries. He has authored numerous journal articles and sixteen books, including most recently *Industry Regulation and the Performance of the American Economy* (W.W. Norton & Co. 1992). Professor MacAvoy has served on the editorial boards of several journals and was the founding editor of the *Bell Journal of Economics and Management Science*. His writings on regulation have been referenced by the Supreme Court in four cases and by lower federal courts in more than twenty cases.

A considerable part of Professor MacAvoy's career has been devoted to public service. In 1965-66, he served as staff economist on the Council of Economic Advisers and in 1966 was a member of President Johnson's Task Force on the Antitrust Laws.

During the Ford administration, he was a member of the Council of Economic Advisers and co-chairman of the President's Task Force on Regulatory Reform. President Carter appointed Professor MacAvoy to the Council of the Administrative Conference of the United States, and President Reagan appointed him to the National Productivity Advisory Committee. Professor MacAvoy's work in Washington has also included fellowships at both the Brookings Institution and the American Enterprise Institute.

Professor MacAvoy is a member of the board of directors for several corporations, including Alumax Corporation, the Chase Manhattan Bank Corporation, LaFarge Corporation, and the Open Environment Corporation. His previous directorships include American Cyanamid Corporation, Colt Industries, Inc., Combustion Engineering, Inc., the Columbia Gas Corporation, and the United States Synthetic Fuels Corporation. He has consulted and testified in numerous antitrust and regulatory proceedings.

Professor MacAvoy's M.A. and Ph.D. degrees in economics are from Yale University, and his A.B. degree as well as an honorary doctorate are from Bates College. In 1981, he was elected to the American Academy of Arts and Sciences.

1

Introduction: The Importance of Competitiveness in Long-Distance Markets

WITH THE 1982 settlement of the antitrust suit against the American Telephone and Telegraph Company, there began what has been the most fundamental change in structure ever required of a single corporation and a single industry. Previously franchised by regulation with a near-monopoly in telephone "end-to-end" service through its "universal network," AT&T was required by the federal court to scale back to becoming only an equipment and long-distance telephone service provider, while its former operating companies were required to specialize in local exchange and long-distance service within local calling areas. And AT&T was no longer alone, even in its long-distance service markets. By virtue of the settlement, two other large long-distance carriers, MCI and Sprint, emerged to reshape the structure of long-distance service markets.

This restructuring took place in a dynamic public policy framework. The Department of Justice, and the federal district court with jurisdiction over the settlement, undertook a process of regulating long-distance providers in order to develop the forces of market competition in these long-distance service markets. the Federal Communications Commission intended to use its control of the long-distance franchise to constrain prices and specify service offerings in ways that would enhance the growth of the smaller long-distance carriers.

Competition was to be the goal, and regulation of the restructured AT&T organization was the chosen instrument to be used to achieve the goal. The justification—with some validity—was that public utility regulation of monopoly service providers had for decades generated results with limited impact on consumer welfare. Further pursuit of such consumer gains as lower prices and higher rates of technical change required different policies than those embedded in the utility regulatory process. While prices for local residential services had been kept down by state regulation, prices of long-distance services were at higher levels under federal utility regulation than would have prevailed in unregulated markets. The goal was to bring long-distance prices down by introducing competition into long-distance services given that divestiture had unbundled the long-distance provider, now without a monopoly franchise, from the local service provider still with the single line to the household.

Would competition in long-distance make a difference? In theory, the stakes in competitive price reductions for business and home subscribers could be quite large indeed. Spending on interstate long-distance services was in excess of $80 billion per year at the time of the settlement and was expected to increase significantly after restructuring. By 1989 it had grown to $101 billion and in 1994 to $124 billion (see table 1-1). If competition emerged in the first ten years after divestiture, and, assuming that prices were reduced as a result, by no more than even 10 percent, toll service subscribers would spend ten billion dollars less per year.

That is because as competitors entered market prices would decline as they have in other network industries after deregulation.[1] But it might be argued that, since long-distance service prices have fallen, in fact competition has emerged. Long-distance rates have indeed fallen, by as much as 50 percent, so that the argument would be that because of the outbreak of competition, since 1984, subscribers have avoided having to pay as much as $60 billion for current levels of service.

1. Paul W. MacAvoy, *Prices After Deregulation: The United States Experience*, 1 HUME PAPERS ON PUB. POL'Y 42 (1993).

TABLE 1–1
LONG DISTANCE SALES REVENUES
AND ACCESS CHARGES, 1984–1994
($ billion)

Year	InterLATA	Local Toll	Total Toll	Access Charges
1984	51.2	30.6	81.7	20.4
1989	66.0	35.3	101.3	25.6
1994	80.7	43.2	123.9	28.5

NOTE: Discrepancies due to rounding.
SOURCES: STATISTICS OF COMMUNICATIONS COMMON CARRIERS 1994, tables 6.1, 6.2, 6.3; LONG-DISTANCE MARKET SHARES, FCC INDUSTRY ANALYSIS DIVISION (Oct. 1995); LONG DISTANCE MARKET SHARES, (Oct. 1995); FCC INDUSTRY ANALYSIS DIVISION, table 5; PRELIMINARY STATISTICS OF COMMUNICATIONS COMMON CARRIER table 2.9; FCC INDUSTRY ANALYSIS DIVISION.

The alternative argument is that the observed price behavior of the last ten years has not been determined by competitive forces. On the contrary, it has been state and federal regulatory agencies that have set in place requirements that have reduced rates. Regulation, not competition, is to be "credited." The agencies have reduced the charges levied on the long-distance carriers by the local operating companies for access to local exchange services. These access rates have constituted the major element of operating costs for the long-distance carriers; as they have fallen, so have prices, as they should have, whether they were competitive or otherwise.[2]

It is at least hypothetical that more competition would have reduced prices to much lower levels than consumers realized from the pass-through of cost reductions in the past ten years. These

2. Whether prices have fallen as much as access charges is an issue in analysis of the "competitiveness" of long-distance markets. Table 1–1 indicates that they have not—the margin of interstate revenues over access costs has increased from 60.1 percent of revenues in 1984 to 64.6 percent of revenues in 1994 (equal to (Col. 1-Col. 4) divided by Col. 1).

effects from competition would be evident not in price levels, but definitively in lower price-cost margins. The sequence of events would be that, as entrants and the smaller incumbent carriers expand, the contest for shares generates discounts on AT&T's standard tariff rates. Whether or not costs at the margin decline, the difference between prices and costs per call decline.

As is evident in their financial returns, the three large carriers have had considerable capacity for reductions in margins. Consider the recent performance of these interexchange carriers as shown in table 1–2. The difference between their long-distance revenues and total direct costs of operations is economic rent or surplus over the level necessary to bring into the market the competitive level of long run supply. In the short run, without capacity replacement, this equals revenues minus operating, advertising and access costs, equal to $30 billion. In the long run, the cost of replacement capacity equals $12 billion so that rents reach an amount less than $18 billion.[3] Monopoly rents are generated from prices that are above competitive levels. The prospect would be that competition would eliminate a substantial part of those rents in the process of reducing prices towards unit costs. Conservatively, a 20 percent price decrease could by the instigation of extensive competition generate gains for business and home consumers of more than $15 billion per year in interstate telephone service charges.[4]

3. There remains an accounting for "SG and A," the infrastructure costs of the three carriers. This is by and large an expenditure of rents, as is indicated by recent actions on the part of all three firms to reduce management costs in the anticipation of more competitive market conditions. But revised estimates of rents can be constructed by adding one half of these, or two-thirds, to costs.

4. That price reduction would generate gains equal to the percentage price change multiplied by existing revenues plus a surplus of one half the change in price times the induced change in demands. This second amount is not estimated here.

TABLE 1–2
REVENUES AND COSTS OF MAJOR
LONG-DISTANCE CARRIERS AS REPORTED, 1994
($ billion)

	AT&T	MCI	Sprint[1]	Total
Cost of Network Operations	4.7	1.5	2.5	8.7
Access Charges	17.8	5.4	3.0	26.2
Advertising Outlays[2]	2.8	0.5	0.5	3.8
SG&A (net of advertising)	8.5	3.3	2.1	13.9
Interest Cost	0.8	0.2	0.4	1.3
Implicit Equity Opportunity Cost[3]	1.9	2.5	1.0	5.4
Total Costs	31.2	14.6	10.9	64.7
Average price-cost margin (percentage)	48.1	51.8	53.8	
Average long term price-cost margin (percentage)	29.3	21.8	26.1	

[1] Sprint data are for long-distance, wireless, and local operations. MCI's access charge expense is calculated as 20 percent of 95 percent of total 1994 access charges.
[2] MCI advertising from 1993 annual report adjusted for 1994 sales growth rate. Sprint advertising expense is author estimate.
[3] The equity opportunity cost is estimated on the assumption that the capital market requires an equity rate of return on investment of 15 percent after taxes.

SOURCES: FCC, INDUSTRY ANALYSIS DIVISION, PRELIMINARY STATISTICS OF COMMUNICATIONS COMMON CARRIERS tables 2.8, 2.9 (July 1995); MCI, AT&T, and Sprint 1994 annual reports.

The stakes are high in public policy formation. Basic changes in rules on entry and pricing in the regulatory agencies, in the divestiture court, and in congressional legislation, could create more - competition. The most important source of new competition is entry of new carriers at the scale of AT&T, MCI, or Sprint; the candidates are the Bell operating companies each in their own service territories, but their entry has been prevented by the divestiture court's prohibition of operating company operations in long-distance markets across local service areas. The Bell companies' established telephony infrastructure gives them the potential to become full-scale competitors in interstate long-distance markets. A reversal of the policy of vertical separation of local and long-distance providers that is at the core of the AT&T divestiture is all that is required.

The policy question is, then, if the operating companies were allowed to extend their service networks into the important interstate long-distance markets, how much more competitive would those markets become? Given the size of long-distance service markets, and the hypothesized effects on prices and service offerings of a full-scale entrant in each market at each location, the answer is clearly of great importance to the future performance of telecommunications. Any new policy agenda would seek to establish a regime that would generate lower prices, more service, and a higher level of nationwide economic activity. It is widely recognized that, as a matter of course, prices will decrease whether or not markets become competitive. But long-distance service has become marked by significant regulatory constraints since divestiture that have controlled entry of carriers and technologies. The alternative is to add new sources of supply into those markets that force the large established interexchange carriers to move toward more competitive pricing.

The analysis of long-distance competitiveness in the following chapters is based on the hypothesis that regulation and antitrust policies have determined the behavior of prices, market shares, and price-cost margins of the large carriers through the ten years after the divestiture. The regulators have made many attempts to influence the competitiveness of pricing in long-distance markets. But analysis here of actual price behavior of the large carriers does not lead to the conclusion that markets have been transformed by this policy process. These attempts to increase the competitiveness of long-distance markets have had opposite results. The policy agenda, as implemented, has constrained, not furthered, the development of competition.

2

Intentions of Antitrust and Regulatory Policies as to Competitiveness

IN 1974 THE Department of Justice filed suit under the Sherman Act charging AT&T with monopolizing pricing and service offerings in both local exchange and long-distance telephone service markets throughout the country. That extraordinary antitrust litigation against a regulated public utility company advanced inexorably, spanning four Congresses, three presidents, and two U.S. district court judges.[1] The end came on January 8, 1982, when Assistant Attorney General William F. Baxter and Charles L. Brown, chairman of AT&T, announced settlement of the government's suit.[2] The consent decree, as approved by Judge Harold Greene, required, among other structural changes, that AT&T divest itself of its local Bell operating companies.[3]

The principal authors of the decree—AT&T, DOJ, and later Judge Greene—expected that divestiture would unleash competition in markets for long-distance telephone services. That, they also

1. *See* Paul W. MacAvoy & Kenneth Robinson, *Winning by Losing: The AT&T Settlement and Its Impact on Telecommunications*, 1 YALE J. ON REG. 1, 14 (1983) [hereinafter *Winning by Losing*].

2. Ernest Holsendolph, *U.S. Settles Phone Suit, Drops IBM Case; AT&T to Split up, Transforming Industry*, N.Y. TIMES, Jan. 9, 1982, at A1, col. 1.

3. United States *v.* American Tel. & Tel. Co., 552 F. Supp. 131 (D.D.C. 1982) (text of the decree), *aff'd sub nom.* Maryland *v.* United States, 460 U.S. 1001 (1983); United States *v.* Western Elec. Co., 569 F. Supp. 1057 (D.D.C. 1983) (approving the plan of reorganization).

expected, would cause the Federal Communications Commission to deregulate rates and entry in long-distance telephone service markets. The authors of the decree expected that the discipline imposed by the operation of competitive markets eventually would replace regulatory oversight of both the FCC and the state regulatory agencies.

But the decade following divestiture has seen the Commission and the state agencies take only partial steps toward deregulation of long-distance markets. The analysis in chapters 4 and 5 concludes that competition among AT&T and other long-distance service providers has not emerged. Tacit collusion among the three large incumbent providers of long-distance services developed instead, principally as a result of the methods used by the Commission to regulate tariff rates, and because the entry of other potentially competitive carriers has been forestalled by the judgment court.

It is necessary, therefore, to reexamine the central premises and purposes of the consent decree. To facilitate that reexamination, this chapter first describes long-distance markets and regulation before divestiture. Next, the chapter analyzes the divestiture decree itself and what it was expected to accomplish, contrasting those expectations with the reality of today's long-distance markets. Finally, we see how the current result serves the interests of various parties to the divestiture.

LONG-DISTANCE SERVICE BEFORE DIVESTITURE

Before divestiture, AT&T supplied, through some twenty-three fully or partly owned "operating companies," approximately 85 percent of local telephone service and, through its Long Lines department, from 80 to 90 percent of all United States domestic and international outbound long-distance service.[4] AT&T's subsidiary, Western

4. STAFF OF HOUSE SUBCOMM. ON TELECOMMUNICATIONS, CONSUMER PROTECTION, AND FINANCE, 97TH CONG., 1ST SESS., TELECOMMUNICATIONS IN TRANSITION: THE STATUS OF COMPETITION IN THE TELECOMMUNICATIONS INDUSTRY 124 (Comm. Print 1981) (estimating AT&T share at 90 percent) [hereinafter HOUSE STAFF REPORT]; United States *v.* American Tel. & Tel. Co., 552 F. Supp. at 171 (AT&T concedes share of 77 percent in 1981)

Electric, was the largest producer of telephone equipment and supplied almost all installations for the entire Bell System.[5] Western Electric and AT&T jointly owned Bell Laboratories, a research facility that developed most of the new technology in the domestic telecommunications industry.[6]

Long-distance services were generally priced above message unit costs, so that earning on these services could be used to keep down monthly flat rates on local telephone services for home and small business subscribers. That scheme of earnings transfer was protected by state and federal regulatory agencies' policies on entry and pricing of all service providers—services with high profit margins were to be kept non-competitive. Ultimately, however, new entrant competition began to erode this arrangement. That competition threatened the subsidy and caused A&T to respond by cutting prices in its Commission rate filings.

Pricing Before Divestiture

The Commission and state regulators read the Communications Act of 1934 to call for "universal service," the pursuit of which required holding rates for local services down to levels at or below the long run marginal costs of just those services so that more low-income or rural subscribers would stay on the system. To do that required the long-distance service provider to take profits from long-distance service to pay for an inordinate share of the joint and common costs of the national network.

Beginning in the 1950s, technological innovations reduced the costs of long-distance service, while inflation began to increase the costs of providing local service.[7] State regulators, with jurisdiction over rates on intrastate local and long-distance calls,

5. *See* HOUSE STAFF REPORT, *supra* note 4, at 159.

6. United States *v.* American Tel. & Tel. Co., 552 F. Supp. at 131.

7. GERALD W. BROCK, TELECOMMUNICATION POLICY FOR THE INFORMATION AGE: FROM MONOPOLY TO COMPETITION 68 (Harvard University Press 1994); *see also* Richard E. Wiley, *The End of Monopoly: Regulatory Change and the Promotion of Competition, in* DISCONNECTING BELL: THE IMPACT OF THE AT&T DIVESTITURE 23, 25 (Harry Shooshan ed., Pergamon Press 1984) [hereinafter DISCONNECTING BELL].

were reluctant to allow increases in these local rates. By working together with the Commission, they were able to institute a policy of keeping both local and long-distance rates relatively constant to take advantage of local exchange costs increasing and long-distance costs decreasing. Ultimately, this strategy of the regulators divorced rates on any set of services from the marginal costs of those services.[8] Business rates were pushed above residential rates, relative to their respective direct costs, and urban and rural users were charged similar rates even though costs of serving rural users were higher.

In the 1960s and 1970s, the Ozark plan for this pricing structure made for significant transfers of earnings from long-distance to cover the costs of local services. The Ozark jurisdictional separations[9] procedure pooled earnings from local and long-distance services to recover joint system costs to result in what Judge Greene later described as a "subsidy from interexchange revenues to local rates."[10] Price levels for all classes of service were set to satisfy "revenue requirements" sufficient together to generate earnings to cover all assigned portions of joint costs. The revenues generated under the requirement were then paid to local companies as "divisions of revenues," if the company was a Bell affiliate, or as "settlements," if the company was an independent firm. At the time of divestiture, the Ozark Plan[11] was still in effect, having substantially increased the proportion of joint and common costs borne by earnings on long-distance services.[12]

8. For a theoretical discussion of the case for rates oriented to costs, see William J. Baumol & David F. Bradford, *Optimal Departures from Marginal Cost Pricing*, 60 AM. ECON. REV. 265 (1970).

9. *See, e.g.*, Separations Procedures, FCC-NARUC Joint Board on Jurisdictional Separations, Recommended Report and Order, Dkt No. 18866, 26 F.C.C. 2d 248 (1970) [hereinafter *Recommended Ozark Plan*]

10. United States *v.* American Tel. & Tel Co., 552 F. Supp. at 169.

11. *Ozark Plan*, 26 F.C.C.2d at 248 ¶ 1.

12. Under the Ozark Plan, the percentage of time equipment that was used for long-distance service was multiplied by 3.3 to determine the percentage of joint and common costs allocated to interstate jurisdictions. Thus, if such equipment was used for interstate calling 7 percent of the time, then 23 percent of the joint and common costs were allocated to interstate jurisdictions *See* Testimony of Charles R. Jones at 11–12, United States *v.* American Tel. & Tel. Co. 552 F. Supp. 131 (D.D.C.

In fact, over time, that system of revenue shifting placed an intolerable burden on long-distance rate to cost margins. In 1955 long-distance operations bore a share of common capital costs roughly comparable to their relative minutes of use of local telephone plant. Interstate telephone calling generated earnings that then covered 3 percent of common costs and interstate calling minutes accounted for about 3 percent of total message traffic.[13] But local service rates were kept relatively constant (so that earnings fell short of making the previous contribution), and the level of contribution from interstate services escalated. In 1981 interstate telephone calling earnings covered 26 percent of all fixed capital costs but calling minutes accounted for only 8 percent of total message traffic.[14] The widening profit margins on long-distance made the larger contributions to cover joint costs possible, but also made long-distance markets more attractive to new entrants. The Commission and state regulators, however, blocked competitive entry into long-distance service markets until 1977. As a result, competitive forces could not operate to lower toll charges.[15] Ultimately, the political pressures for more carrier choice increased so that the Commission did allow new entrants into these markets. Local service subsidies in the separations process had to be reduced.[16]

The New Entrants Before Divestiture

In the 1950s and 1960s the Commission opened equipment sales markets to entry.[17] In the 1970s the agency permitted entrants into

1982).

13. CONGRESSIONAL BUDGET OFFICE, THE CHANGING TELEPHONE INDUSTRY: ACCESS CHARGES, UNIVERSAL SERVICE AND LOCAL RATES 10 (1984) [hereinafter CBO STUDY] (numbers estimated from chart)

14. *Id.* at 9.

15. *See* STEPHEN BREYER, REGULATION AND ITS REFORM 296–98 (Harvard University Press 1982); Gunter Knieps & Pablo T. Spiller, *Regulation by Partial Deregulation: The Case of Telecommunications*, 35 AD. L. REV. 391, 395 (1983).

16. Paul W. MacAvoy & Kenneth Robinson, *Losing By Judicial Policymaking: The First Year of the AT&T Divestiture*, 2 YALE J. ON REG. 225, 228–32 (1985) [hereinafter *Losing by Judicial Policymaking*].

17. Hush-a-Phone Corp. *v.* United States, 238 F.2d 266 (D.C. Cir. 1956) (FCC policy preventing customer's use of non-AT&T equipment was "unwarranted

network-wide long-distance service markets in an elaborate sequence of case decisions.[18] During these three decades, microwave technology that had been developed by Bell Labs during World War II could have made entry into markets for long-distance transportation services relatively straightforward for carriers of all sizes. New carriers could have used microwave relays to provide service at costs substantially below the fully embedded costs of AT&T's existing wire facilities accounted for in AT&T's rates. But the Commission was wary of the impact that "cream-skimming" by new entrants might have on separations payments within the incumbent network.

The Commission authorized certain non-telecommunications companies to provide microwave services for their own internal use in 1959.[19] By 1963, MCI applied to the agency to supply private line communications between St. Louis and Chicago; MCI did not request interconnection with the Bell switched network connecting local users to other users or to long-distance trunk lines. But if granted access to that network, another carrier could offer telephone service across the country without constructing its own facilities except for initiating calls for its own subscribers. In 1969 the Commission granted MCI's application, but on the condition that it offer only private non-switched services.[20] And in its 1971

interference with the telephone subscriber's right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental"); Carterfone Device, 13 F.C.C.2d 420, 14 F.C.C.2d 571 (1968) (relaxing regulations on use of non-Bell equipment for equipment already in place). *See also* AT&T Foreign Attachment Tariff Revisions, Memorandum Opinion and Order, 15 F.C.C.2d 605 (1968), 18 F.C.C.2d 871 (1969).

18. Bell System Tariff Offerings of Local Distribution facilities for Use by Other Common Carriers, 46 F.C.C.2d 413 (1974), *aff'd dub nom.* Bell Tel. Co. of Pa., 503 F.2d 1250 (3rd Cir. 1974); *see also* MCI Telecom Corp. *v.* FCC (*Execunet I*), 561 F.2d 365 (D.C. Cir. 1977), *cert. denied*, 434 U.S. 1040 (1978); MCI Telecom Corp. *v.* FCC (*Execunet II*), 580 F.2d 590 (D.C. Cir.), *cert. denied*, 439 U.S. 980 (1978); Specialized Common Carrier Servs., Report and Order, Dkt. No. 18920, 29 F.C.C.2d 870 (1971), *aff'd sub nom.* Washington Util. & Transp. Comm'n *v.* FCC, 513 F.2d 1142 (9th Cir.), *cert. denied*, 423 U.S. 836 (1975) [hereinafter *Specialized Common Carrier*].

19. Allocation of Frequencies in the Bands Above 890 Mc., Report and Order, Dkt. No. 11866, 27 F.C.C. Rcd. 359 (1959), *modified*, 29 F.C.C. Rcd. 825 (1960).

20. Microwave Communications, Inc., 18 F.C.C.2d 953 (1967), *recon. denied*,

Specialized Common Carriers decision, the Commission adopted rules sanctioning general entry into private line services.[21]

Because AT&T Long Lines made separations payments to cover the costs of the infrastructure to provide local services, while independent "specialized common carriers" (SCCs) did not, the latter could generate larger investor profits from such toll services. Thus, following MCI's lead, affiliates of Southern Pacific Railroad and other large companies entered long-distance markets where and when they were allowed. But when MCI proposed a new switched service, to be called Execunet, in direct competition with AT&T's Long Lines, the Commission refused approval.[22] In reversing the Commission's Execunet decision,[23] the U.S. Court of Appeals for the D.C. Circuit opened the floodgates to new carriers buying AT&T's switching services and installing their own long lines in toll markets across the country.

The Commission took steps to adapt to the new judicially imposed reality.[24] But the agency failed to change the separations process to reflect the effects of entry on the price-cost margins of the incumbent carrier. The Commission required the other carriers to pay access charges to use AT&T's switching capacity, but those charges provided AT&T with margins that recovered only part of the joint and common costs of the national network and were less than the contributions required of AT&T.[25] Those differentials in the per-call earnings from access put AT&T's prices above the average total costs of the new entrants.[26] As a result of price

21 F.C.C.2d 190 (1970), *modifications granted*, 27 F.C.C.2d 380 (1971).

21. *Specialized Common Carrier*, 29 F.C.C.2d at 870.

22. MCI Telecommunications Corp., Investigation into the lawfulness of Tariff FCC No. 1 insofar as it purports to offer Execunet service, Dkt. No. 20640, 60 F.C.C.2d 25, 42–44 ¶¶ 61–69 (1976) (*Execunet*); Exchange Network Facilities for Interstate Access (ENFIA), Memorandum Opinion and Order, CC Dkt. No. 78-371, 71 F.C.C.2d 440, 441 n.4 (1979).

23. *Execunet I*, 561 F.2d at 365; *Execunet II*, 580 F.2d at 590.

24. Resale and Shared Use of Common Carrier Services & Facilities, Report and Order, Dkt. No. 20097, 60 F.C.C.2d 261, 263–66 ¶¶ 3–9 (1976), *aff'd sub nom.* AT&T Co. *v.* FCC, 572 F.2d 17 (2d Cir.), *cert. denied*, 439 U.S. 875 (1978); Resale & Shared Use of Common Carrier Public Switched Network Services, Report and Order, CC Dkt. No. 80-54, 83 F.C.C.2d 167, 177–85 ¶¶ 21–43 (1981).

25. ENFIA, 71 F.C.C.2d at 443 ¶ 8.

26. MacAvoy & Robinson, *Winning by Losing*, *supra* note 1, at 13. *See* Ex-

differences, AT&T's revenue share in long-distance services markets began to fall about two percentage points a year.[27] Either AT&T could have lowered its long-distance rates and faced the wrath of regulators who relied on long-distance revenues to subsidize universal service or it could have continued to lose market share.

AT&T resisted competitive inroads not only by seeking to cut long-distance rates,[28] but also by delaying or refusing to provide equal local exchange interconnections to the competing carriers.[29] The Antitrust Division responded to that pattern of behavior by taking the position that pricing and interconnection problems of the new vendors were the consequence of the Bell System's monopoly position and that firm's incentive under regulation to exclude competition in order to protect revenue sources necessary to cover total costs.[30] The Antitrust Division failed to recognize that pattern of behavior in opposition to competitive entry was not limited to the Bell System. For example, local telephone companies owned by GTE, and others, with virtually no toll operations, reluctantly provided local connections in much the same way.[31] Almost all

change Network Facilities for Interstate Access (ENFIA), Report and Order, CC Dkt. No. 79-245, 51 Rad. Reg. 2d (P & F) 677, 677 ¶ 1 (1982); AT&T, Manual & Procedures for the Allocation of Costs, 84 F.C.C.2d 384, 412–31 (1981)(Appendix A, Cost Allocation Manual) [hereinafter *AT&T Manual*].

27. Southern Pac. Com. Co. *v.* AT&T Co., 556 F. Supp. 825, 884 (D.D.C. 1983).

28. *See* MacAvoy & Robinson, *Winning by Losing, supra* note 1, at 6 (chart indicating that the price charged by AT&T for a long-distance call decreased in 1975 and 1977). AT&T reacted to competition in the private line market by seeking lower deaveraged tariffs for high-density areas. *Id.* at 15–16 (discussing AT&T's Hi/Low tariff proposal); Wiley, *The End of Monopoly: Regulatory Change and the Promotion of Competition, supra* note 7, at 33–34. AT&T's proposed and implemented price reductions prompted significant private antitrust litigation. *E.g.*, Southern Pacific Com. Co. *v.* AT&T, 556 F. Supp. 968, 968–69 (D.D.C.), *aff'd*, 740 F.2d 1081, 1105 (7th Cir. 1983), *cert. denied*, 440 U.S. 971 (1984).

29. *See* United States *v.* American Tel. & Tel. Co., 552 F. Supp. at 1354–57.

30. *See* MacAvoy & Robinson, *Winning by Losing, supra* note 1, at 14–15.

31. *See, e.g.*, United States *v.* GTE Corp., 1985-1 Trade Cas. (CCH) ¶ 66,354 at 64,756 n.23 (D.D.C. 1984) (alleged denial of equal access); Illinois Bell Tel. Co. *v.* FCC, 740 F.2d 465, 476 (7th Cir. 1984) (alleged hobbling of equipment competitors).

independent telephone companies resisted long-distance competition, although they had neither equipment manufacturing nor toll operations.[32]

The separations scheme, rather than anticompetitive strategies, explains that opposition to entry.[33] Diminished contributions from long-distance market operations resulted from long-distance entry, causing the regulatory authorities to impose "access" charges on the other long-distance carriers for connection to the AT&T local exchange system. To be sure, the access charges paid by the competing carriers were a fraction of the settlements paid by AT&T Long Lines. Until 1984, the leading competitive carrier, MCI, paid $235 per local line per month; AT&T paid settlements on average of $600 per line per month.[34] Even with such charges, potential competition in long-distance service markets posed a threat to the traditional transfer of earnings in the direction of covering costs for local telephone services. New entrants, with increasing shares, did not have the same regulatory obligation to subsidize these local services. AT&T's declining market share meant that the earnings available to cover local exchange costs would decline. While the traditional regulatory apparatus remained, the transfers on which it operated were disappearing.

Antitrust Action Against AT&T

The Department of Justice filed its antitrust case against AT&T on November 20, 1974, following an intensive three-year investigation

32. *See, e.g.*, Hearing before the Subcomm. on Telecommunications, Consumer Protection, and Finance of the House Comm. on Energy and Commerce, 97th Cong., 2d Sess. 768 (1982) (testimony of Richard A. Lumpkin, U.S. Independent Telephone Association); Hearing on S.611 and S.622 Before the Subcomm. on Communications of the Sen. Comm. on Commerce, Science, and Transportation, 96th Cong., 1st Sess. 425 (1979) (statement of Carlton Appelo, Organization for the Protection and Advancement of Small Telephone Companies).

33. MacAvoy & Robinson, *Losing by Judicial Policymaking*, *supra* note 21, at 231–32.

34. See National Ass'n of Regulatory Util. Comm'rs *v.* FCC, 737 F.2d 1095, 1144–45 (D.C. Cir. 1984); MCI Telecommunications Corp. *v.* FCC, 712 F.2d 517, 527 (D.C. Cir. 1983). *See also* R. Davidson, *AT&T and the Access Charge* 7–8 (1984) (Harvard Bus. School Study No. 0-384-208).

of Bell System activities. The suit was brought under section 2 of the Sherman Act[35] and relied initially on a novel "triple-bottleneck" theory.[36] The Department alleged that AT&T had leveraged its dominant position in three sets of markets—equipment, local exchange, and long-distance—to monopolize the entire domestic telecommunications industry. To prove liability, the government had to establish that AT&T possessed monopoly power in relevant markets and that it willfully had maintained that power by means other than through providing superior products, use of business acumen, or by historic accident.[37]

The Department pointed to episodes that demonstrated AT&T "willfully maintained that power" in both long-distance and equipment markets. But that allegation related to equipment markets went nowhere. Judge Greene dismissed claims of predatory pricing in equipment markets[38] and expressed doubts as to the strength of remaining equipment charges: "[W]here the government was able to show that AT&T's market share was high, it was generally unable to demonstrate significant anti-competitive behavior; where evidence of behavior was more damning, it had difficulty establishing market power."[39] And the Justice Department's episodes supposedly demonstrating exclusionary behavior in long-distance markets were likewise unconvincing. To begin with, Justice could not show that AT&T had monopoly power in long-distance markets. According to the Supreme Court, "[m]onopoly power is the power to control prices and to exclude competitors."[40] Courts often look to market share as the principal sign of monopoly power.[41] At the time of trial, despite Bell's allegedly exclusionary activities, entry into the

35. 15 U.S.C. § 2.

36. *See* Hearing on H.R. 13015 Before the Subcomm. on Communications of the House Comm. on Interstate & Foreign Commerce, 95th Cong., 2d Sess. 748 (1978) (testimony of Assistant Attorney General for Antitrust John H. Shenefield).

37. United States *v.* Grinnell Corp., 384 U.S. 563 (1966); United States *v.* Aluminum Co. of Am., 148 F.2d 416 (2d Cir. 1945) [hereinafter *Alcoa*].

38. United States *v.* American Tel. & Tel. Co., 524 F. Supp. 1336, 1380 (D.D.C. 1981).

39. United States *v.* American Tel. & Tel. Co., 552 F. Supp. at 174.

40. United States *v.* E. I. du Pont de Nemours & Co., 351 U.S. 377, 391 (1956); American Tobacco Co. *v.* United States, 328 U.S. 781, 811 (1946).

41. *Alcoa*, 148 F.2d at 424.

long-distance market in the 1970s had become significant and sustained. Such entry even accelerated during the trial period. In fact, as Judge Greene noted in the decision, "[b]oth the Department of Justice and AT&T contend that competition in the interexchange market is growing and that this increase in competition demonstrates an absence of monopoly power."[42] But AT&T's strongest argument against the government's contention that it had power to control price and exclude competitors in long-distance was that it was comprehensively regulated by the Commission and state regulatory bodies so as to prevent it from setting prices.[43]

The Justice Department also had trouble showing a monopolizing purpose on AT&T's part. In attempting to prove that AT&T's actions were purposeful, the Department contended that AT&T had engaged in predatory pricing in the long-distance market—that is, that it raised rates in local service where there was no entrant so that it could lower rates and exclude entrants in contested long-distance markets.[44] In their influential article published in 1975, Phillip Areeda and Donald Turner defined predatory pricing as responsive prices below the alleged predator's average variable costs of targeted products or services.[45] But the Justice Department did not concern itself with establishing that AT&T's pricing practices met that or any other recognized predation standard. The government's chief trial attorney told the court, "Your Honor, we don't know whether they were pricing above any particular standard of cost."[46] Instead, the government alleged that AT&T had priced in its response to competitors *without regard to cost*, and that such "strategic pricing" constituted the functional equivalent of predatory pricing.[47] But as Judge Greene himself

42. United States *v.* American Tel. & Tel. Co., 552 F. Supp. at 171. Interestingly, DOJ took a contrary position at trial.

43. That argument was adopted in *Southern Pacific Communications Co.* v. *AT&T Co.*, in which AT&T faced a private antitrust plaintiff. 556 F. Supp. 825, 885–86 (D.D.C. 1983) [hereinafter *Southern Pacific*].

44. United States *v.* American Tel. & Tel. Co., 524 F. Supp. at 1365 n.118.

45. Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section Two of the Sherman Act*, 88 HARV. L. REV. 697 (1975).

46. Transcript at 13,113, United States v. American Tel. & Tel. Co., 552 F. Supp. 131 (D.D.C. 1982).

47. United States *v.* American Tel. & Tel Co., 524 F. Supp. at 1364.

noted, there was no legal basis for the novel theory that pricing by a regulated utility without regard to costs constitutes an antitrust violation.[48] And, beyond the analytical substance, AT&T had a powerful defense to the government's predation arguments: Even if it had used control over local service to maintain monopoly power in long-distance service, AT&T did so using rates set with the approval of the regulatory agencies charged with containing the rate level to the average costs of all services.

The Justice Department also alleged that AT&T's delay in providing interconnection to its long-distance competitors showed a monopolizing purpose.[49] But those episodes were subject to ambiguous interpretation. They could have been no more than slow adaptation to rapidly changing market conditions but unchanging regulatory requirements. AT&T was caught between the market - necessity of lower pricing and the regulatory requirements for rate averaging. AT&T did not have the option, as the Justice Department alleged, of responding to new entry by cutting rates for some services and then raising rates for others, because regulators controlled rate levels as well as specific rates to favored classes of subscribers. AT&T's response was to delay compliance with interconnection requests until the regulatory agencies gave measured and detailed guidance on the scope of the interconnection privileges. That took time because it put responsibility for the resulting rate structure on the federal and state regulatory agencies. In *Southern Pacific*, Judge Richey observed, "Had the Commission not engaged in its usual regulatory lag and dealt forthrightly and properly with the problems as they arose, then few, if any, of the cases would now be before the antitrust courts, such as this one."[50]

Given those weaknesses in its case, the government would probably not have succeeded in showing that AT&T's actions were carried out with the purpose of monopolizing telecommunications.

48. *Id.* at 1370; *see Southern Pacific*, 556 F. Supp. at 914. Nevertheless, by denying a motion to dismiss following the close of the government's presentation, Judge Greene refused to reject the theory United States *v.* American Tel. & Tel. Co., 524 F. Supp. at 1369.

49. United States *v.* American Tel. & Tel Co., 524 F. Supp. at 1354, 1355–57.

50. *Southern Pacific*, 556 F. Supp. at 1097

Nevertheless, in ruling on AT&T's motion to dismiss at the close of the government's case, Judge Greene declined to rule in AT&T's favor; instead, he put the burden of disproof of the monopolizing claim to the defendant.[51] And AT&T's defense was severed two-thirds of the way through the trial by a settlement agreement that it initiated. The Department achieved its litigation objectives without a judicial decision on the merits of its argument that the dominant incumbent carrier foreclosed competition.[52]

THE DIVESTITURE DECREE

As negotiated, the settlement required AT&T to divest itself of its local exchange operations by setting up independent and regional Bell operating companies. The agreement eliminated restrictions on AT&T imposed by a 1956 consent decree[53] and left it free to diversify into data processing and other new fields.[54] The new operating companies were required to offer all long-distance carriers "equal interconnection"—that is, technically equivalent connection of a locally originating or terminating call from its subscribers to be transported and switched over a long-distance system.[55] The decree also restricted the operating companies to providing local exchange and toll telephone services.[56]

Judge Greene refused to approve the proposed settlement without several changes, including a seven-year ban on AT&T's participation in "electronic publishing." He barred the operating companies from entering that field altogether.[57] The court approved a revised decree embodying these changes in August 1983. On January 1, 1984, AT&T formally divested its local Bell operating companies.

51. . United States *v.* American Tel. & Tel. Co., 524 F. Supp. at 1343.

52. *Id.*

53. *See* United States *v.* Western Electric Co., 1956 Trade Cas. (CCH) ¶ 68,246 (D.N.J. 1956).

54. United States *v.* American Tel. & Tel Co., 552 F. Supp. at 179–80.

55. *Id.* at 188–89.

56. *Id.* at 228.

57. *Id.* at 180–86.

The Justice Department's Purpose

The premise of the decree was that competitive enterprises providing long-distance service, information services, and equipment manufacturing should be separated from those providing local exchange services. With respect to the Bell operating companies, the first set of activities were to be the province of a new AT&T, and the second would be that of local Bell operating companies. The first had the potential to evolve so that they were provided in competitive markets, while the second would operate still in the single carrier, public utility mode. In the words of the Justice Department in 1982:

> [T]he basic theory . . . was that . . . AT&T has had both the incentive and ability . . . to leverage the power it enjoys in its regulated monopoly markets to foreclose and impede the development of competition in related, potentially competitive markets . . . . The divestiture will separate local exchange functions, which, in today's technology, by and large have monopoly characteristics and are to be provided by the local operating companies, from those that technology has opened to competition, which will be provided by AT&T.[58]

The Department's theory was that AT&T had monopolized the potentially competitive long-distance markets to generate earnings that were "lost" when it kept local rates too low. That monopolizing strategy depended on its control of local exchange. In 1994 former Assistant Attorney General William Baxter recollected:

> The pre-divestiture Bell System provided regulated monopoly local exchange service, but also competed in markets such as long distance that depended on local exchange service as an essential

58. Response to Public Comments on Proposed Modification of Final Judgement, 47 FED. REG. 23,320 (May 27, 1982) (statement of Department of Justice).